

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): A device for data communication between a first host device or a further host device and at least one client device on a shared transmission path having:

a first host device, which includes a host application;

at least one further host device, which includes a host application;

at least one client device, which includes a client application;

wherein

the host devices each have a master application interface module, which is linked in the transmission path;

the host devices each have a master application module which connects the particular host application to the assigned master application interface module;  
each client device has a client application interface module, which is linked in the transmission path and is connected to the assigned client application;

a bus control module is provided;

the transmission path is implemented as a data bus representing a ring connector;

the respective master application interface module of each host device

and the respective client application interface module of each client device(s), as well as the bus control module,—are connected to one another by the data bus for exchanging data and/or signals with one another and

the bus control module being implemented to control the access of the host devices to the data bus.

2. (Previously Presented): The device according to Claim 1, wherein

the host applications of the first and/or the further host devices have a processor.

3. (Canceled)

4. (Canceled):

5. (Canceled):

6. (Canceled):

7. (Currently Amended): A method of data communication between a first host device or a further host device and at least one client device on a shared transmission path implemented as a data bus representing a ring connection, having the following steps:

opening a communication connection between a host application running on the host device and a client application running on the client device;

transmitting arbitration information on the data bus along the opened communication connection, the arbitration information containing data, on the basis of which the data bus is reserved for a predetermined time interval or for a predetermined data volume for a subsequent data transmission on the data bus along the opened communication connection;

transmitting data and/or signals between the host application and the client application and/or between the client application ~~in~~ and the host application on the data bus along the opened communication connection.

8. (Previously Presented): The method according to Claim 7, wherein the arbitration information is transmitted as an arbitration block, an arbitration block having arbitration data which includes information about the length of the predetermined time interval or about the extent of the predetermined data volume for the subsequent data transmission.

9. (Previously Presented): The method according to Claim 8, wherein

the arbitration block has activity data which includes information about the current state of the transmission path, from which it may be concluded whether the transmission path is currently being used for data transmission.

10. (Previously Presented): The method according to Claim 7, wherein in the event of an access wish of a host application to the transmission path, the following steps are performed:

the master application interface module assigned to the host application accepts the arbitration block present on the transmission path,  
reads out the activity data,  
checks, on the basis of the activity data, whether the transmission path is currently free for data transmission,  
writes, if the transmission path is free, activity data in the arbitration block which indicates use of the transmission path by the host application, and  
transfers the arbitration block to the bus control module via the transmission path; upon which the bus control module reserves the transmission path for the access by the host application.

11. (Previously Presented): The method according to Claim 10, wherein after termination of a data transmission, the activity data in the arbitration block is reset by the master application interface module and the transmission path is thus released again.

1               12. (New): A method of data communication in a device for data  
2 communication as claimed in Claim 1 between a first host device or a further host device and at  
3 least one client device on a shared transmission path implemented as a data bus representing a  
4 ring connection, comprising:  
  
5               opening a communication connection between a host application running on the  
6 host device and a client application running on the client device;

7                   transmitting arbitration information provided in an arbitration block on the data  
8 bus along the opened communication connection, the arbitration information containing data, on  
9 the basis of which the data bus is reserved for a predetermined time interval or for a  
10 predetermined data volume for a subsequent data transmission on the data bus along the opened  
11 communication connection;

12                   transmitting data and/or signals between the host application and the client  
13 application and/or between the client application and the host application on the data bus along  
14 the opened communication connection;

15                   wherein in the event of an access wish of a host application to the transmission  
16 path, the following steps are performed:

17                   the master application interface module assigned to the host application  
18 accepts the arbitration block present on the transmission path,

19                   reads out activity data from the arbitration block,

20                   checks, on the basis of the activity data, whether the transmission path is  
21 currently free for data transmission,

22                   writes, if the transmission path is free, activity data in the arbitration block  
23 which indicates use of the transmission path by the host application, and

24                   transfers the arbitration block to the bus control module via the  
25 transmission path;

26                   upon which the bus control module reserves the transmission path for the  
27 access by the host application.